

A 2-piece kit consists of two separate grip panels, attached to each other with a screw which passes through the grip frame and threads into a press-fit nut mounted in one panel (usually the right grip panel). The back of all Tombstone grip panels is flat (cast in mold, so the back is the top of the open mould). It may require some routing and the drilling of a small alignment pin hole to match an alignment pin in the grip frame. This is best done AFTER the grip has been fitted for size (sanded to desired thickness, and sanded at the edges to match the frame exactly). Some grips may use a raised spacer on the back to match cut-outs in the grip frame. These are fitted, by you, to the cut-outs in the frame by sanding the edges, and then the grip panel is fitted to the gun and the spacer epoxy glued to the back of the grip. The spacer prevents the grip from turning about the screw like a pivot. Most revolvers use the top and front edge of the grip against the frame itself to prevent rotation, and keep the grip in position with a small pin, which fits a hole you make in the bottom backside of the grip after the grip has been sanded to size.

WARNING: Be SURE your gun is UNLOADED before you do any work on it! Check the chamber on autoloaders! Watch for little springs and pins under the grips on some guns, especially autoloaders. Spread an old white sheet or pillow case under the gun so if anything falls out, it will land where you can see it.

Fit and finishing information:

I do not drill grip allignment pin holes, cut the mounting screw to length or put a final polish on any of the grips. These are simple setps you can do, get a great fit and save money. The grips are slightly oversized so you can sand them down for a perfect fit. This is the reason you can buy a high strength polyurethane grip for less than half what a finished grip, of the same type, would cost. And, it lets you make the fit correct even if your particular gun grip isn't quite the same size as same brand out of another box!

Many guns are not made to consistent, precise shape and size in the grip frame. With other guns, like the standardized 1911 "government" Colt, I can provide grips that take only the lightest finishing to fit every model that uses regular "GI" specification frame size. But not many brands follow the exact size specs of a military pistol design. Some even have completely different mounting methods and grip sizes for the same model (H&R is notorious for this),

- (1) I strongly recommend the first thing you do after you remove your old grips is to check to be sure the new ones are in fact large enough to fit the frame. You may wish to remove the alignment pin in the frame to accomplish this step. They should push out, or gently tap them out with a drift punch and a small hammer. If the grips seem to be larger than the frame, that will be corrected by sanding the back flat and marking the excess with a pencil. Then simply sand off the excess. In most cases it will be a very small amount.
- (2) Grip thickness adjustment. Fasten a piece of 120 grit abrasive paper to a flat surface. You can use tacks, glue, whatever you prefer, but be sure it is flat and not going to move. Set the grip (flat back down) on your sandpaper and start sanding GENTLY with a back and forth motion. Insure your hands are keeping the grip flat all the way around. Change to a circular motion once in a while. You want to get the bottom of the panels flat. Do not rush or over do this sanding. TIP: Take a large magic marker and "paint" the entire bottom of the grip before starting to sand. (If you slop marker on the front edge of the grip, clean it off quickly with rubbing alcohol before it dries). When all the black is gone, the panel is flat, assuming your hands grip on the panel kept it flat on the sandpaper.
- (3) Carefully sand each piece to fit your particular weapon. I have not put a polished finish on these grips because with the amount of sanding you will be doing, any finish would be gone by the time you complete fitting the grips. Not all grips need polishing. Heavily carved, checkered, and otherwise decorated grips including stag horn effect grips don't need polishing. They can be made to look nicer with a firm brushing using a toothbrush, and in some cases can be finished with a little hard clear wax to seal the surface. Grips that have a smooth finish benefit from polishing. You can be the judge.
- (4) When the grips fit the gun frame exactly, put the alignment pin back in the frame and paint the tip of the pin with a "Magic Marker" Align each grip panel with the frame, and then press it firmly against the pin to make a mark on the back of the grip. Use a small "bur" in a rotary bit tool (Dremel, for instance) to "drill" a small hole to match the alignment pin. A twist bit can grab and pull through the entire panel before you have a chance to stop it, unless you use a drill press and clamp the grip securely. Flat bits and rotary burs don't tend to "pull" into the work, so they are easier to control. If you make the hole too larger or get it off the proper location, just fill it with epoxy glue (5-minute epoxy, sold in 2-part tubes in hardware stores). Let the glue cure and then re-drill. Or if the hole is simply too large, let the glue cure part way, put Vasoline on the pin and frame, and push the still-soft but not runny glue-filled hole over the pin to let it create its own hole!

I do not cut the screw to exact length because I don't have your gun and don't know what thickness you will want to sand the grips. There is no "standard" for all weapons that would give me the exact length of the screw, so it is best I leave the final trimming up to you. Just assemble the grips, mark or measure how much to cut off, disassemble, and cut the new screw to length. Round over the edges of the threads where you cut them and you have finished. A file or grinder is handy to round the cut end. A belt sander is also fine if you drill a hole in a scrap of wood or metal and press or thread the screw through it so you can hold it securely (it will get hot from sanding off the tip). I try to send enough screws so you will have one that, hopefully, is just the right length. But it isn't hard to cut and/or sand off the end.

Some guns do not use an alignment pin, but depend on a raised projection or spacer on the back of the grip to bear against a cut-out in the frame and keep the grip secure from turning. For these kinds of guns, like the Colt 1903 or Browning 1910 models, I include spacers which you will want to fit into the grip frame cut-out by light sanding on the edges until the spacer just presses into the opening. The thickness of the spacer is often too great and would drag on the magazine, but that is easy to adjust once the spacer has been epoxy glued to the back of the grip. Wait for the epoxy to cure (even 5-minute epoxy really isn't that well cured for at least a few hours, so be patient). I like to also screw or pin the spacer, just to take recoil torque off the epoxy glue, by making a couple of small holes through the spacer adn into the grip about half way, to fit either little screws or small steel or brass pins. Be careful not to drill through the front of the grip! The pins need to be a snug press fit. That just takes the shear force off the epoxy junction, so the spacer and grip won't separate. Normally it won't if you clean the surface with acetone to prime it, and mix the epoxy according to instructions.

I send separate instructions regarding fitting spacers to grips, since only certain models of guns use them. Most revolvers rely on an alignment pin in the frame of the gun, and a matching hole in the lower portion of the grip. A few single actions are built without this feature and instead use a spacer across the inside, somewhere, that bears against the grip frame at the base and one side. The famous early grip maker Jay Scott used to simply drill and press fit two screws or pins in the back of his flat grip backs, so that instead of a spacer, each of these two pins would bear against the inside of the frame.

Combined with the screw clamping action and the normal recessed top of the grip frame, the two pins would absolutely locate and secure the grip panels. You can do that if your gun doesn't have a locating pin. Or, if you wish, I can provide two thin wedge shaped spacers, each of which can be sanded to fit inside the framt at the base, and then glued to the lower backside of the grip. Just ask when you place the order, since I don't know if your version of a given model has the pin or not. Often the same model will use various configurations depending on when it was made or if it was a contracted import model from various sources, or finished in one country after being built as parts in another. Lots of reasons why just the make and model alone doesn't cover all the possible variations in grip attachment or size.

Some guns require recesses in the back of the grips, to clear safety levers or trigger bars and other operating parts. Some have notches or cut-outs to clear projections on the frame (many Ruger single actions have a small angled relief at the top front corner, on the back). These are all easy to make with a rotary bit tool (Dremel is one brand) using a small flat-end cutter bit or a small sanding drum. Secure the grip so it won't move and slowly, carefully grind away the required depth. Magic Marker ink on the projecting part will transfer to the grip back and show you when you have removed enough material to clear.

For smooth finished grips, this polyurethane epoxy resin takes a very good polish. Sand gently with 320, wet. Then switch to 400, wet then 600, wet and final polish with 1500, wet. You can buy this paper at most major home centers or hardware stores. You could also use a bench grinder with muslin wheel and white jewelers polish. The application of some quality car wax will seal the pores very nicely on the smooth and textured grips. Naturally, you won't want to polish the carved, engraved, or checkered pattern grips. Just brush them firmly with a toothbrush to give them a bit of a sheen, and then seal with wax. I've already covered in detail on the webstore how pearl and other translucent effects don't show up very well on checkered and carved grips, but are best used on smooth finished grips only. But so long as you know that, there's no problem ordering pearl effects on checkered grips. You just won't get the full benefit of the depth and patterns unless the grip you order is a smooth surface model.

The girps will clean up well after a day's shooting with warm soapy water and a soft cloth. I soaked a sample grip in Acetone for two days with very little effect, but you worked hard to make the grips look good, don't jeopardize the finish on them by soaking them in cleaning fluid laced with powder residue. Checkered and carved grips will hold dirt and stains whereas a smooth grip is easy to polish and remove grime. Just one more benefit to a smooth surface. Also easier to repair if you "ding" it because you can sand it without having to re-carve or re-checker (not the easiest thing to do right).

CAUTION: When sanding, always wear a face mask to avoid breathing in the fine dust! Dispose of the dust by sweeping it into a bag and putting it in the trash. It isn't "toxic" but anything you make into airborne dust can be harmful to your lungs. Do not melt, burn, or heat the grips or burn the dust because that will result in toxic fumes.

Wear eye protection when sanding and drilling. Note that you will need to drill most of the grips so that they will fit on your particular grip frame. Grips that use a single mounting screw and come with the screw and ferrules installed are pre-drilled. Other grips may or may not be pre-drilled, depending on the model and style. If the pilot hole does not line up with your grip frame studs or hole, you can slightly elongate the hole with a needle file or a rotary bit (very gentle pressure, as roto-bits cut extremely fast!).

Epoxied spacers can be made more secure by drilling a blind hole and pressing a pin into it, through the spacer and into the grip back. This adsorbs the torque from recoil rather than allowing the epoxy junction to do it alone (which usually works OK, but steel pins of 1/8 to 3/16 inch are better). An extra pin or even just a brad with the head cut off can be put into the grip back so it bears against the frame and holds the grip securely from rotation, just like the Jay Scott grips of the 1950-60 era.